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	Application No.	Applicant(s)	
Notice of Allowability	10/796,577	TESTONI, ANNE L.	
	Examiner	Art Unit	<b>—</b>
	Nikita Wells	2881	•
The MAILING DATE of this communication ap All claims being allowable, PROSECUTION ON THE MERITS herewith (or previously mailed), a Notice of Allowance (PTOL- NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT of the Office or upon petition by the applicant. See 37 CFR 1.	IS (OR REMAINS) CLOSED 85) or other appropriate common RIGHTS. This application is	in this application. If not included nunication will be mailed in due course.	. THIS
<ol> <li>This communication is responsive to <u>Examiner's Amena 2006</u>.</li> </ol>	dment on November 27, 2006	and "Amendment B" received Septem	<u>ber 1,</u>
2. 🔀 The allowed claim(s) is/are <u>1-2, 432, and 36-53</u> .			
3. Acknowledgment is made of a claim for foreign priority  a) All b) Some* c) None of the:  1. Certified copies of the priority documents h  2. Certified copies of the priority documents h  3. Copies of the certified copies of the priority  International Bureau (PCT Rule 17.2(a)).  * Certified copies not received:  Applicant has THREE MONTHS FROM THE "MAILING DAT noted below. Failure to timely comply will result in ABANDO THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.	ave been received. ave been received in Applicat documents have been receiv  E" of this communication to fi	ion No ed in this national stage application from	
4. A SUBSTITUTE OATH OR DECLARATION must be su INFORMAL PATENT APPLICATION (PTO-152) which			OF
5. CORRECTED DRAWINGS ( as "replacement sheets") r  (a) including changes required by the Notice of Draftsr  1) hereto or 2) to Paper No./Mail Date  (b) including changes required by the attached Examin Paper No./Mail Date  Identifying indicia such as the application number (see 37 CF)	person's Patent Drawing Reviewers  ner's Amendment / Comment  R 1.84(c)) should be written on	or in the Office action of the drawings in the front (not the back) of	of
each sheet. Replacement sheet(s) should be labeled as such  6. DEPOSIT OF and/or INFORMATION about the de attached Examiner's comment regarding REQUIREMEN	eposit of BIOLOGICAL MA	FERIAL must be submitted. Note the	€
Attachment(s)			
1. Notice of References Cited (PTO-892)		nformal Patent Application	
2. Notice of Draftperson's Patent Drawing Review (PTO-94	Paper No	Summary (PTO-413), o./Mail Date <u>11/27/06</u> .	
Information Disclosure Statements (PTO/SB/08),     Paper No./Mail Date	7. 🛭 Examiner	s Amendment/Comment	
Examiner's Comment Regarding Requirement for Depos of Biological Material	sit 8. ⊠ Examiner 9. □ Other	s Statement of Reasons for Allowance	
		Nikita Wells Primary Examiner Art Unit: 2881	

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## **DETAILED ACTION**

## Examiner's amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mary R. Olynick on November 27, 2006.

The Examiner initiated an Interview with the Applicant in order to correct faulty claim dependencies in claims 4 and 36. The following are the necessary corrections:

In claim 4, line 1: "claim 3" has been changed to --claim 1--, and "the image" has been changed to --an image--.

In claim 36, line 1: "claim 35" has been changed to --claim 32--, and "the image" has been changed to --an image--.

## Allowable Subject Matter

- 3. Claims 1-2, 4-32, and 36-53 are allowed.
- 4. The following is an examiner's statement of reasons for allowance:

The Applicant amended the independent claims 1, 15, 32, and 47, and presented arguments in favor of allowance of the amended claims according to the "Amendment B" received September 1, 2006. With respect to the amended independent claims 1, 15, 32, and 47, the Applicant demonstrated to the Examiner's satisfaction that the 35 U.S.C. 102(b and e) rejections, as well as the 35 U.S.C. 103(a) rejections, over the primary references of M. Sato

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(5,457,725), Yun et al. (2003/0223536), J. Ladell (3,046,399), and L. Parobek (4,959,848), are no longer applicable to the Applicant's invention.

With respect to the independent claims 1, 15, 32, and 47, M. Sato, Yun et al., J. Ladell, and L. Parobek, as well as any other prior art, fail to disclose a method and apparatus of inspecting a defect in or on a semiconductor wafer, comprising: directing a beam towards the surface of the semiconductor wafer wherein the defect resides to thereby emit X-rays; detecting the emitted X-rays with plurality of detectors positioned at a plurality of angles with respect to the wafer surface; collecting X-ray data from the detectors; and based on the X-ray data collected from the detectors at the plurality of angles, determining a location of the defect in three dimensions in relation to a plurality of different process layers of the wafer. The key element in the applicant's invention, which is no found in the prior art, is the collection of the X-ray data from the detectors at the plurality of angles, thereby determining a location of the defect in three dimensions in relation to the plurality of different process layers of the wafer.

The dependent claims 2 and 4-14; 16-31 and 42-46; 36-41; and 48-53, are allowed by virtue of their dependence upon the independent claims 1, 15, 32, and 47, respectively.

## Conclusion

- 5. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."
- 6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nikita Wells whose telephone number is (571) 272-2484. The

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examiner can normally be reached on 8:30 AM - 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew Dunn, can be reached on (571) 272-2312. The central fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

7. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nikita Wells, Primary Examiner

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November 27, 2006

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